

WHAT IS CLAIMED IS:

1. An HPLC column, comprising the combination of an inner tube having a through bore; absorbent densely filling said tube bore to the opposite tube ends; filters containing the absorbent at the tube ends and sealing members overlying the filters and capping the inner tube ends; and end coupling members disposed outwardly adjacent the sealing members;

an outer tube snugly overlying all of the inner tube and the sealing members, and part of the end coupling members;

means cooperating between the opposite ends of the outer tube and the underlying parts of the end couplings to mechanically hold them together and to mechanically hold the filters and sealing members relative to the inner tube; and

said sealing members and said coupling members having at each of its opposite ends means for providing a leak-proof connection with a capillary line and securing fitting for establishing a serial flow path through the column via said column inner tube bore, absorbent and filters.

2. An HPLC column according to Claim 1, further comprising said means holding the overlying outer tube and end couplings together comprises mechanically deforming said outer tube ends over and onto said sealing members.

3. An HPLC column according to Claim 1, further comprising each end coupling member having an endward facing surface defining an endward shoulder on its outer edge, and the overlying outer tube being mechanically deformed radially inwardly over and

outer tube being mechanically deformed radially inwardly over and against said endward shoulder.

4. An HPLC column according to Claim 3, further comprising each end coupling member having an inward facing surface defining an inward shoulder on its outer edge whereby a groove is defined between said endward and inward surfaces, and said overlying outer tube being mechanically deformed radially inwardly over said endward shoulder and into said groove to be closely adjacent the inward facing surface, operable to have the outer tube at least partly hidden inwardly behind the inward facing surface.

5. An HPLC column according to Claim 4, made by a method of using a tool having a diverging conical face and moving such tool axially inwardly and against the exposed end corners of the outer tube to deform said overlying outer tube radially inwardly and over and against said endward shoulder.

6. An HPLC column, comprising the combination of
an inner tube having a through bore;
absorbent densely filling said tube bore;
a filter at each tube end containing the absorbent thereat;
a sealing members overlying each filter and part of the
inner tube for capping absorbent in the inner tube;
end coupling members disposed outwardly adjacent the
respective sealing members;

an outer tube overlying all of the inner tube and the
sealing members, and part of each end coupling member;

the endward part of the outer tube overlying the end

coupling member being interlocked therewith to mechanically hold them together and to mechanically hold the filters and sealing members within the inner tube; and

each sealing member and coupling member having at each outward end means for providing a leak-proof connection with a capillary line and securing fitting, whereby a serial flow path can be established through the column via said column inner tube bore and through the absorbent and filters.

7. An HPLC column according to Claim 6, further comprising the endward overlying part of the outer tube being radially deformed inwardly to interlock mechanically with and onto said end coupling member.

8. An HPLC column according to Claim 7, further comprising the end coupling member having an endward facing surface defining an endward shoulder on its outer edge, and the overlying outer tube being mechanically deformed radially inwardly over and against said endward shoulder.

9. An HPLC column according to Claim 8, further comprising each end coupling member having an inward facing surface defining an inward shoulder on its outer edge whereby a groove extended axially a distance slightly in excess than the wall thickness of the outer tube is defined between said endward and inward surfaces, and said overlying outer tube being mechanically deformed radially inwardly over said endward shoulder and into said groove to present its end edge closely adjacent the inward facing surface and at least partly hidden inwardly behind the

inward facing surface.

10. The method of making an HPLC column, comprising the steps of

filling an inner tube having a through bore with absorbent particles, with filters against the absorbent at the bore ends, and the filters and bore ends capped with sealing members sealed relative to the inner tube;

positioning the capped inner tube, filters and sealing members in an outer tube, sized so that it snugly overlies all of the inner tube and filters but only part of the end coupling members; and

mechanically deforming part of the outer tube that overlies each end coupling member onto and against the end coupling members to mechanically hold them relative to the outer tube;

so that with the sealing members and end coupling members having means for receiving and securing a capillary line and its fitting, leak-proof connections can be established with the column ends for allowing a series flow path through the column.